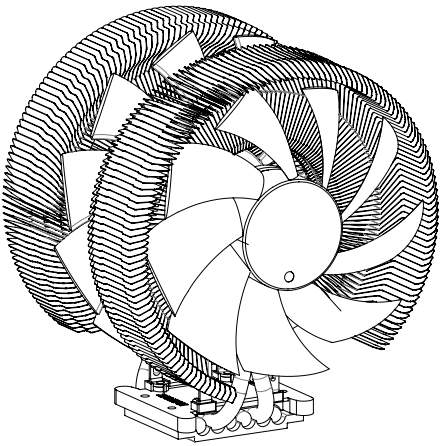
User's Manual

ZALMAN

CNPS9900 DF



Intel Socket LGA 2011 / 1366 / 1156 / 1155 / 775 CPUs
AMD Socket FM2/FM1/AM3+/AM3/AM2+/AM2 CPU&APUs

To ensure safe and easy installation, please read the following precautions

www.ZALMAN.com

Ver. 130214

1. Precautions

1) Avoid inserting objects or hands into the fan while it is in operation to prevent product damage and injuries.
2) Do not ingest the Thermal Grease, and avoid its contact with skin and eyes. If contact is made with skin, wash off with water. If ingested or irritation persists, seek medical attention.
3) To prevent possible injuries, gloves must be worn while handling this product.
4) Excessive force exerted on the fan may cause damage to the fan and/or system.
5) Use and keep product away from the reach of children and pets.
6) Check the components list and condition of the product before installation. If any problem is found, contact the retailer to obtain a replacement.
7) Zalman Tech Co., Ltd. is not responsible for any damages due to overclocking.
8) Before transportation of the system, the cooler must be removed. Zalman is not responsible for any damages that occur during the transport of a system.
9) Enable PWM function in BIOS settings after installation.
10) Product design and specifications may be revised to improve quality and performance.

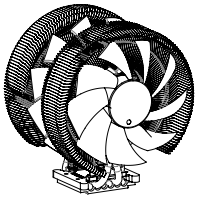
Disclaimer) Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, or improper testing.

2. Specifications

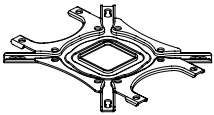
Spec. \ Model			CNPS9900DF
Meterial			Pure Copper & Black Nickel Plated
Weight			850g
Dimension			140(L) x 110(W) x 154(H) ㎜
Dissipation Area			6,800㎠
Fan	RPM	Front 120mm	1,000rpm ±10% (3pin)
		Center 140mm	900 ~ 1,400rpm ±10%(4pin)
	Noise Level		19 ~ 27dBA ±10%
	Bearing Type		Long Life Bearing
Thermal Grease [ZM-STG2]	Contents		3.5g
	Temperature Range		-40˚C ~ +150˚C (-40˚F ~ +302˚F)

3. Components

1) Common Components

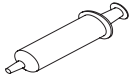


Cooler



Backplate

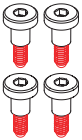
User's Manual



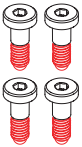
Thermal Grease
[ZM-STG2]

Side Caps

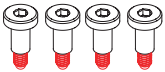
Allen Wrench (3/32")



Gold Bolts
(Socket LGA 1366)



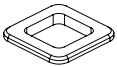
Silver Bolts A (4mm)
(Socket LGA 2011)



Silver Bolts B (3mm)
(Socket AMD/LGA 1156/1155/775)

Y-Connector Cable

Nuts

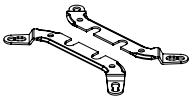


Loading Block

Double-sided Tape

2) Intel Components

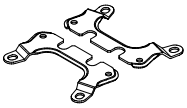
Socket LGA 2011/1366/1156/1155/775



Intel Clip

3) AMD Components

Socket FM2/FM1/AM3+/AM3/AM2+/AM2



AMD Clip

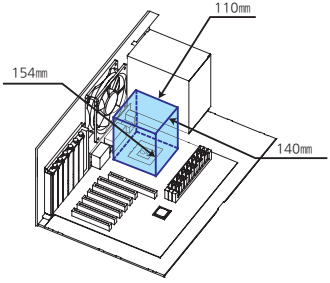
4. Installation Requirements

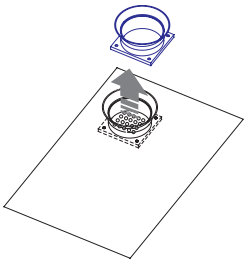
1) Space Requirements

The installation requires unobstructed space of 110mm (width) x 140mm (length) x 154mm (height) with the CPU as the central reference point. Before installation, please check if memory modules or motherboard heatsinks will not have any clearance issues with the CPU cooler.

2) Air Guide Removal

Air guides on enclosures must be removed, before the cooler's installation, for they protrude into the cooler's required space.



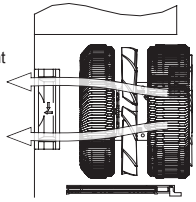


3) Protective Brace Removal

Please unclip and remove the heatsink's plastic brace before installing the cooler.

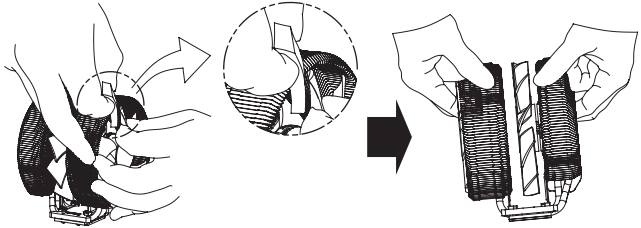
4) Cooler Orientation

Orient the cooler so that the thinner heatsink is facing the rear exhaust fan, while the thicker heatsink is facing the front case fan (see right image).



5) Fan Protection Pad Removal & Cooler Handling

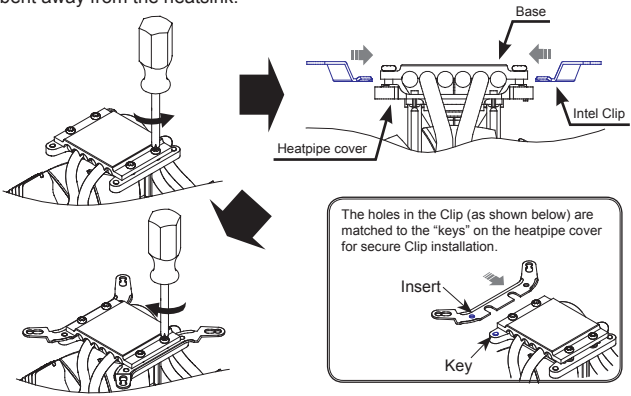
Remove the fan protection pad before you begin the installation process. Also, due to the sharp heatsink fins, wearing gloves while handling the heatsink fins is strongly recommended.



5. Installation

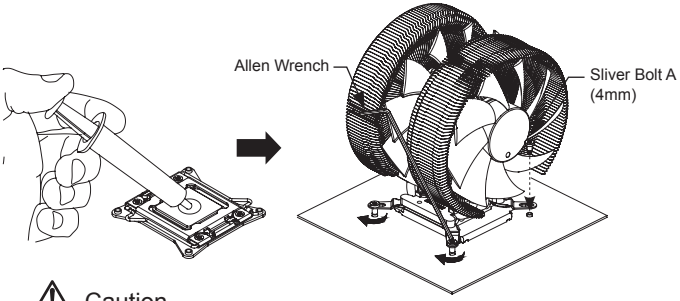
A. Intel Socket Installation (Go to Page 8 For AMD Sockets)

Partially unscrew the four bolts located on the base of the CPU cooler. Then, insert the Intel Clips between the base and the heatpipe cover, with the clips bent away from the heatsink.


Base
Intel Clip
Heatpipe cover
The holes in the Clip (as shown below) are matched to the “keys” on the heatpipe cover for secure Clip installation.
Insert
Key

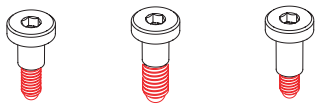
1) Intel Socket 2011 Installation

Apply thermal grease just enough to thinly cover the CPU surface. Then, insert four Silver Bolts (type A) through the outermost Intel Clip holes, and using the 3/32” Allen Wrench, fasten the Silver Bolts incrementally while alternating between them.



Caution

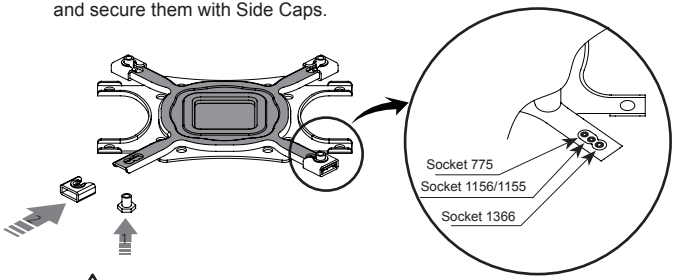
Please make sure to use the Bolts with correct color and thread length as they can appear quite similar.



Gold Bolts (Socket LGA 1366) | Sliver Bolts A (4mm) (Socket LGA 2011) | Sliver Bolts B (3mm) (Socket AMD/LGA1156/ 1155/775/)

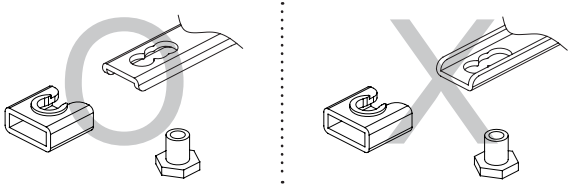
2) Intel Socket LGA 1366/1156/1155/775 Installation

① Insert the Nuts to the Backplate according to the socket type and secure them with Side Caps.



Caution

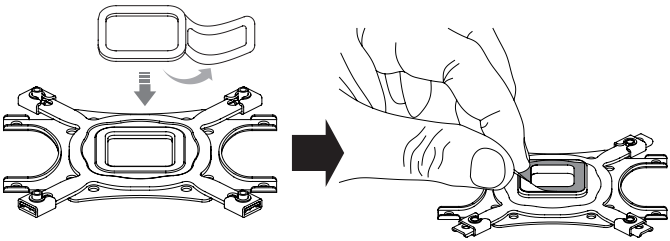
Take note of the orientation of the Nuts and the Side Caps.



② Socket LGA 1366/1156/1155 Installation

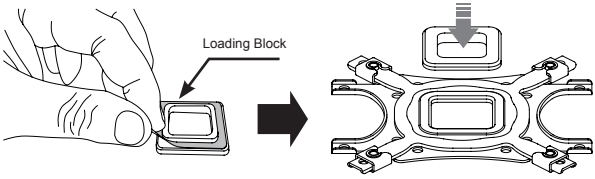
Peel off one side of the Double-sided Tape and attach it to the center of the Backplate with the sticky side facing down. Then, peel off the top cover.

※ Socket LGA 1366/1156/1155 Installation does not require the Loading Block.

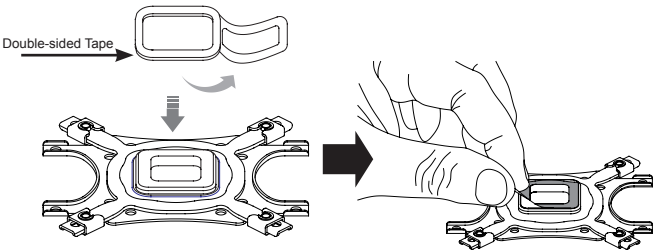


③ Socket LGA 775 Installation

Peel off the Loading Block cover and attach it to the Backplate with the sticky side facing the center of the Backplate.

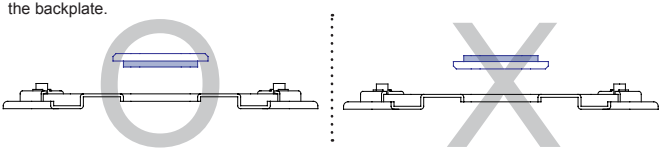


Peel off one side of the Double-sided Tape and attach it with the sticky side facing the Loading block. Then, peel off the top cover.

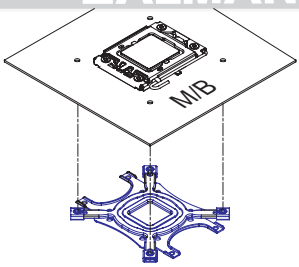


⚠ Caution

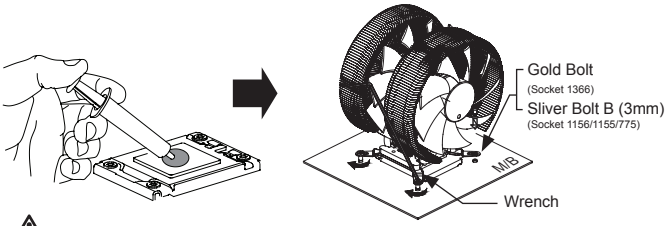
Please note that the sticky side of the Loading Block serves to attach the Loading Block to the backplate.



④ Attach the Backplate assembly to the back side of the motherboard by aligning the Nuts to the motherboard mounting holes. If you were unsuccessful at first attempt, you may continue with the installation without the Double-sided Tape as it is not a necessary component.

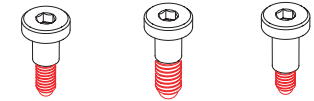


⑤ Apply thermal grease just enough to thinly cover the CPU surface. Then, insert four Silver Bolts B (for socket LGA 1156/1155/775) or Gold Bolts (for LGA 1366) through the Intel Clip holes, and using the 3/32" Allen Wrench, fasten the Bolts incrementally while alternating between them.



Caution

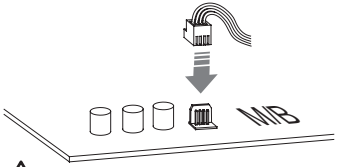
Please make sure to use the Bolts with correct color and thread length as they can appear quite similar.



Gold Bolts (Socket 1366) | Sliver Bolts A (4mm) (Socket 2011) | Sliver Bolts B (3mm) (Socket 1156/1155/775/AMD)

⑥ Connect the Y-Connector Cable to the 4Pin(140mm Center FAN), 3pin (120mm Front FAN) .

⑦ Connect the Y-Connector Cable to the mother board.



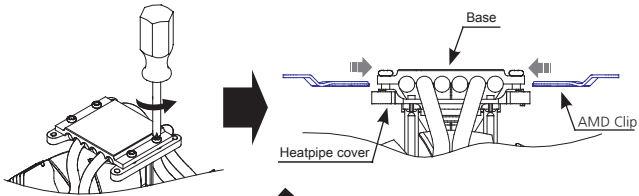
Caution

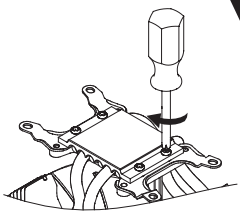
Please make sure that PWM Control Mode is activated in the motherboard's BIOS settings. Beware of fan wire interuption

B. AMD Socket Installation

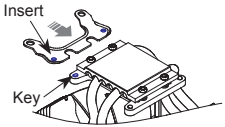
1) AMD Socket FM2/FM1/AM3+/AM3/AM2+/AM2 Installation

① Partially unscrew the four bolts located on the base of the CPU cooler. Then, insert the AMD Clips between the base and the heatpipe cover, with the clips bent away from the heatsink.

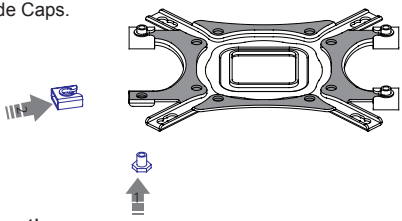




The holes in the Clip (as shown below) are matched to the “keys” on the heatpipe cover for secure Clip installation.

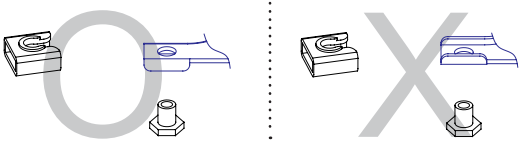


② Insert the Nuts to the Backplate according to the socket type and secure them with Side Caps.

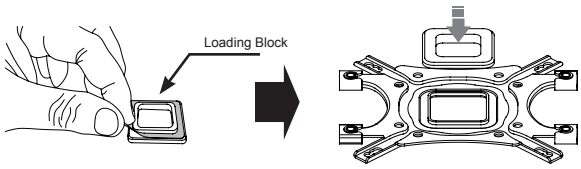


Caution

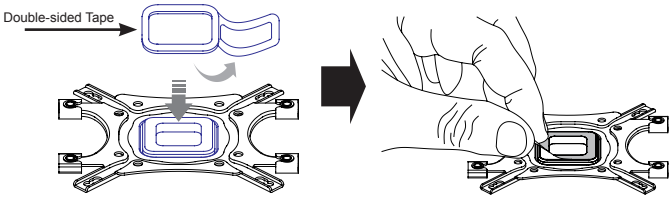
Take note of the orientation of the Nuts and the Side Caps.



③ Peel off the Loading Block cover and attach it to the Backplate with the sticky side facing the center of the Backplate.

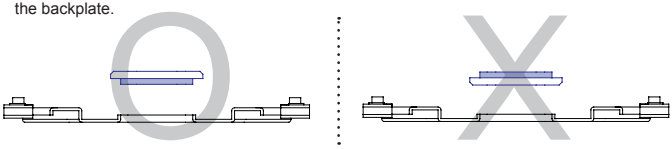


Peel off one side of the Double-sided Tape and attach it with the sticky side facing the Loading block. Then, peel off the top cover.

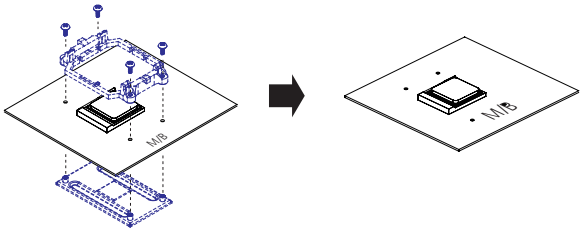


Caution

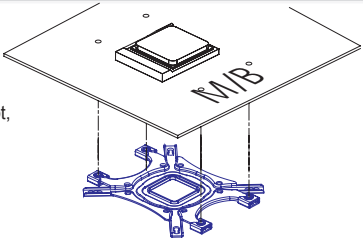
Please note that the sticky side of the Loading Block serves to attach the Loading Block to the backplate.



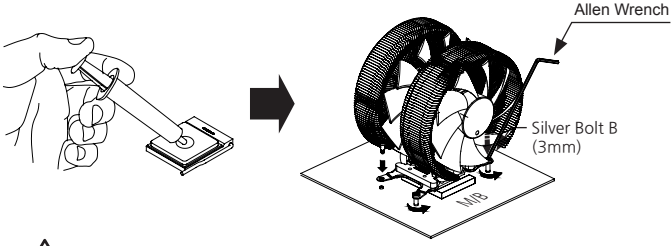
④ Dismantle the CPU cooler retention bracket on the motherboard by unscrewing the four bolts located at each corner (method may vary; consult the motherboard manual for details). Be sure to keep the retention bracket so the stock CPU cooler can be used as a backup.



⑤ Attach the Backplate assembly to the back side of the motherboard by aligning the Nuts to the motherboard mounting holes.
If you were unsuccessful at first attempt, you may continue with the installation without the Double-sided Tape as it is not a necessary component.

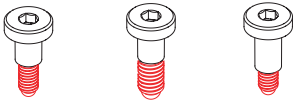


⑥ Apply thermal grease just enough to thinly cover the CPU surface. Then, insert four Silver Bolts B through the AMD Clip holes, and using the 3/23" Allen Wrench, fasten the Bolts incrementally while alternating between them.



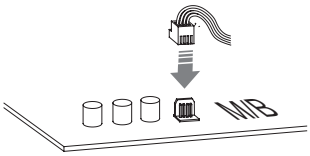
⚠ Caution

Please make sure to use the Bolts with correct color and thread length as they can appear quite similar.



Gold Bolts (Socket LGA 1366) | Sliver Bolts A (4mm) (Socket LGA 2011) | Sliver Bolts B (3mm) (Socket AMD/LGA 1156/1155/775)

⑥ Connect the Y-Connector Cable to the 4Pin(140mm Center FAN), 3pin (120mm Front FAN) .
⑦ Connect the Y-Connector Cable to the mother board.



⚠ Caution

Please make sure that PWM Control Mode is activated in the motherboard's BIOS settings. Beware of fan wire interuption